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L8: Entry 11 of 13

File: USPT

Jun 9, 1998

DOCUMENT-IDENTIFIER: US 5762963 A

TITLE: Method and compositions for controlling oral and pharyngeal pain using capsaicinoids

Brief Summary Text (12):

The dosage forms of capsaicin that have been most widely studied clinically are homogeneous capsaicin-containing creams for topical applications (Zostrix, Zostrix-hp, and Axsain (Zostrix GenDerm Corp., Northbrook, Ill.)). These products have been shown to be effective in managing painful conditions such as rheumatoid arthritis, osteoarthritis, diabetic neuropathy, postherpetic neuralgia, postmastectomy pain syndrome, cluster headache, and reflex sympathetic dystrophy. Cordell, et al., at p. 334; J. A. Rumsfield, et al., "Topical Capsaicin in Dermatologic and Peripheral Pain Disorders," DICP, The Annals of Pharmacotherapy, vol. 25, pp. 381-387 (April 1991).

Detailed Description Text (13):

Capsaicin can be isolated from capsicum fruits by methods known to those of ordinary skill in the art, including ethanol extraction from capsicum frutescens or capsicum annum. See, e.g., J. C. Thresh, "Capsaicin, the Active Principle of Capsicum Fruits," p. 21, The Pharmaceutical Journal and Transaction (Jul. 8, 1876). Alternatively, capsaicin may be synthesized by methods known to those of ordinary skill in the art. See, e.g., L. Crombie, et al., "Amides of Vegetable Origin. Part VI. Synthesis of Capsaicin," Journal of the Chemical Society, pp. 1025-1027 (1955); O.P. Vig, et al., "A New Synthesis of N-(4'-Hydroxy-3'-methoxybenzyl)-8-methyl-non-6(E)-enamide (Capsaicin)," Indian Journal of Chemistry, vol. 17B, pp. 558-559 (June 1979); G. T. Walker, "Capsaicin: Properties, reactions and uses," Manufacturing Chemist and Aerosol News, pp. 35-36, 42 (June 1968).

**WEST****End of Result Set**☐  

L8: Entry 13 of 13

File: USPT

Apr 13, 1982

DOCUMENT-IDENTIFIER: US 4324785 A

TITLE: Foot powder

Brief Summary Text (6):

Preparations which provide a sense of warmth to painful areas of the body are well known, and are generally based on counterirritants, substances which produce a superficial irritation in order to reduce irritation in adjacent structures. Such counterirritants commonly used in these preparations include capsicum oleoresin, methyl salicylate, turpentine, mustard, and camphor. A commercially available preparation, for instance, contains capsicum oleoresin, turpentine and petrolatum. These heat-producing preparations are recommended for treatment for muscle pain and arthritis, but are not associated with producing a sense of warmth apart from the treatment of pain.

Brief Summary Text (15):

The powder prepared according to the present invention will contain, by volume, about 30% to about 80%, and preferably about 30% to about 70%, and most preferably about 40% to about 45% cayenne pepper. Known also as capsicum, cayenne pepper is the dried ripe fruit of Capsicum frutescens L., Solanaceae (African Chillies), Capsicum annuum L., var conoides Irish (Tobasco Pepper), Capsicum annuum var. Longum Sendt (Louisiana Long Pepper), or a hybrid between the Honka variety of Japanese Capsicum and the Old Louisiana Sport Capsicum known as Louisiana Sport Pepper (Fam. Solanaceae). Capsicum, and a constituent thereof, capsaicin, are known counterirritants.

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Mar 6, 2001

File: USPT

L8: Entry 10 of 13

DOCUMENT-IDENTIFIER: US 6197823 B1  
TITLE: Pain reliever and method of use

Abstract Text (1):  
position cont

Abstract Text (1):  
A composition containing capsaicin together with other ingredients to neutralize the discomfort resulting from the application of capsaicin to the skin enabling treatment of many types of discomforts, including arthritis pain, neuropathy, post surgical scarring, hemorrhoid pain and itching, and pruritis without the discomfort normally associated with the topical application of capsaicin.

Brief Summary Text (3):  
...itis is medically

Brief Summary Text (3):  
Arthritis is medically termed as an inflammation of a joint or joints and is one of a number of diseases and disorders of the skeleton and body system. Arthritis arises from many causes, some well-defined, some still unknown, and it is treated in many different ways. There are two common types, the first of which is inflammatory, of which rheumatoid arthritis is the most commonly acknowledged and a non-inflammatory, second type, most commonly represented by degenerative joint disease, or wear and tear arthritis. Inflammatory arthritis is a disease not of the joints alone but of the whole bodily system, in particular, the connective tissues of the body. It is an autoimmune disease, where the body's immune system attacks its own host (i.e. itself) and produces inflammation. Degenerative joint disease is a chronic joint disease, often occurring in more elderly people. In both cases many manifestations are similar. The joints, whether singly or in multiples, are affected. The joints may become swollen, warm, deformed, gnarled, and in many instances present grotesque deformities. In many cases it also affects the adjacent muscles and tendons, as well as other connective tissues of the body. The primary disease produces symptomatic swelling, pain and stiffness.

Brief Summary Text (4):  
new and old dru

In many cases the drugs are given to relieve the pain and stiffness of the body. They are also used to relieve the pain and stiffness of the joints.

Brief Summary Text (4):  
Various new and old drugs have been developed for the treatment of arthritis, anywhere from non-steroidal anti-inflammatory drugs to cortisone. Many of these systemic drugs have dangerous side effects. Their dosage must be carefully prescribed and administered under controlled conditions and circumstances to avoid unpleasant and dangerous side effects.

Liniments and the like) have been utilized for these purposes. These have provided a means of relieving the pain and stiffness of the joints.

Brief Summary Text (5):  
topical agents

have dangerous side effects.

Brief Summary Text (5):

Several topical agents (creams, ointments, liniments and the like) have been utilized for the relief of the pains and aches of arthritis. Most of these have provided a little, but only temporary, relief to persons suffering from pain. Many combinations of varying ointments, creams, aqueous solutions, liniments and the like for the treatment of arthritis are known. The most efficacious of these contains as its active ingredient the vegetable products derived from the seed and pods of the capsicum plant, commonly known as red pepper. Capsicum-derived ointment is devised for external application to the affected area of the body by applying to the area adjacent to the muscle, joint or tendon and rubbing it into the skin. The active ingredient is capsaicin. With initial as well as persistent application, capsaicin is effective to relieve the aches and pains of various muscle or skeletal origin, such as arthritis, muscle strains, tendinitis, bursitis and soft tissue diseases.

Brief Summary Text (20):  
... is trans-8-met

Brief Summary Text (20):  
Capsaicin is trans-8-methyl-N-vanillyl-5 nonenamide, a naturally occurring alkyl vanillylamide, a type of capsaicinoid. It is found in high concentration in fruit of plants of the Capsicum genus. The chili pepper, red pepper and paprika are all species



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L8: Entry 8 of 13

File: USPT

Oct 30, 2001

DOCUMENT-IDENTIFIER: US 6310091 B1

TITLE: Fungicidal saponin, CAY-1, and isolation thereof from Capsicum species fruit

Abstract Text (1):

A novel antifungal compound, "CAY-1", was isolated from the dried fruit of Capsicum frutescens (cayenne pepper), purified to homogeneity, and characterized as a novel sterol glycoside (a saponin) with a molecular mass of 1243.35 Da. CAY-1 demonstrates antifungal activity against a large variety of fungal organisms associated with diseases in plants, animals and humans including, but not limited to, Aspergillus flavus, A. fumigatus, A. parasiticus, A. niger, Pneumocystis carinii and Candida albicans, but has minimal toxic effects on mammalian cells.

Brief Summary Text (13):


Peppers have been used for many centuries to inhibit food spoilage (Billing, J. et al., Q. Rev. Biol., 1998, 73:2-47). For example, the Mayan pharmacopoeia describes the use of the tissues of certain Capsicum species in herbal remedies for a variety of ailments of microbial origin (Cichewicz, R. H. et al., J. Ethnopharm., 1996, 52:61-70). To date, only a few bioactive compounds have been isolated from this pepper family. The most commonly-known compounds belong to the capsaicinoid group, of which capsaicin (n-vanillyl-8-methyl-6-(E)-nonamide) is the predominant species. Capsaicin has been studied extensively and has demonstrated a high degree of biological activity affecting nervous, cardiovascular, and digestible systems (Virus, R. M. et al., Life Sci., 1979, 25:1273-1284; Monsereenusom et al., CRC Critical Reviews in Toxicology, 1982, 10:321-339; Surh, Y. J. et al., Life Sci., 1995, 56:1845-1855). Presently, two prescription drugs are based on capsaicin. Zostrix.RTM. (Genderm) is used for the treatment of shingles and arthritis while Axsain.RTM. (GalenPharma) is used for relief of neuralgias, diabetic neuropathy, and postsurgical pain.

Brief Summary Text (17):

We have now identified a novel antifungal compound, from the dried fruit of Capsicum frutescens (cayenne pepper). This compound, referred to herein as "CAY-1", was purified to homogeneity and has been characterized as a novel sterol glycoside (a saponin) with a molecular mass of 1243.35 Da.

Detailed Description Text (3):

As previously mentioned, the CAY-1 compound of the invention is isolated from cayenne pepper (Capsicum frutescens), a member of the Solanaceae. Typically, the dry pepper is first finely ground by any conventional means, such as in a pin mill, Wiley mill, or the like. The ground pepper is then extracted with a suitable solvent. We have found that 1% (w/v) potato dextrose broth (PDB) at pH of about 6.0 in a 1:4 pepper:PDB (w/v) ratio is especially effective for this purpose. The pepper/PDB slurry is preferably cooled to a temperature of 1-5.degree. C. such as by placing it in ice for several hours in order to stabilize the antifungal agent against degradation by other plant components until the fractionation is commenced. Thereafter, the liquid fraction is separated from the solids and recovered. The separation may be effected by centrifugation with recovery and filtration of the supernatant. The fungicidal activity is eluted from the supernatant with an aqueous methanol or other polar solvent. The activity will elute from an extraction cartridge with 75% (v/v) MeOH. The active agent is then purified from the methanol eluate, such as by liquid chromatography, high performance liquid chromatography (HPLC), or the like.

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L8: Entry 9 of 13

File: USPT

Aug 21, 2001

DOCUMENT-IDENTIFIER: US 6277398 B1

TITLE: Analgesic drug composition containing a capsaicinoid and potentiator therefor

Brief Summary Text (3):

Capsicum oleoresin, an extract of capsicum (dried red pepper and other species of the genus Capsicum such as Capsicum frutescens and Capsicum annum), contains the capsaicinoid capsaicin (trans-8-methyl-N-vanillyl-6-noneamide). Both capsicum oleoresin and capsicum have for many years been used in a variety of over-the-counter topical analgesic medications such as HEET, INFRA-RUB, OMEGAOIL, and SLOAN's LINIMENT. See also, U.S. Pat. No. 3,880,996 which discloses a topically administered analgesic compositions for the symptomatic relief of localized pain of musculo-skeletal etiology containing, inter alia, capsicum oleoresin.

Detailed Description Text (16):

The drug composition of this invention is especially useful for the treatment of such pains as neuralgias, rheumatoid arthritis, bursitis, myositis, integumental pain, etc., for which it is administered as a topical preparation, preferably in combination with a penetration enhancer. The drug composition can be formulated as a liquid, paste, ointment, cream, lotion, or gel, e.g., any of the gels disclosed in U.S. Pat. Nos. 5,178,879, 5,306,504 and 5,420,197.

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Feb 19, 2002

File: USPT

L8: Entry 7 of 13

DOCUMENT-IDENTIFIER: US 6348501 B1  
TITLE: Lotion compositions utilizing capsaicin

Abstract Text (1):

A lotion for treating the symptoms of arthritis using capsaicin and an analgesics, and a method for making.

Brief Summary Text (2):

Arthritis is a common chronic problem, which occurs below the surface of the skin. Millions of people and animal have the condition. Various topical creams and ointments are sold for treatment of arthritis, however, most utilize an anesthetic, such as lidocane, benzocaine or other numbing agent for the skin surface.

Brief Summary Text (7):

The present invention relates to a method of treating arthritis using a lotion composition therefore in which capsaicin is used as the principle therapeutic agent along with an analgesic and an anesthetic in a lotion.

Brief Summary Text (10):

Capsaicin is trans-8-methyl-N-vanillyl-5 nonenamide, a naturally occurring alkyl vanillylamide, a type of capsaicinoid. It is found in high concentration in fruit of plants of the Capsicum genus. The chili pepper, red pepper and paprika are all species of Capsicum. All hot papers contain capsaicinoids. Capsaicinoids are natural materials which produce a burning sensation in the mouth. Capsicum has recently been officially defined in the USP 23 where it is defined as the dried ripe fruit of Capsicum frutescens Linne or Capsicum annum Linne.

Brief Summary Text (13):

The composition of the invention comprises capsaicin as a first active ingredient and at least one second active ingredient acting as an analgesic to reduce the sensation of capsaicin induced skin irritation. The ingredients are contained in a carrier fluid. The genus Capsicum is a member of a large tropical family solanaceae. There are numerous species, of which Capsicum annum, Capsicum chinense and Capsicum frutescens are closely related. Capsicum frutescens is also known as Cayenne Pepper, Chili Pepper, Pimento Tabasco Pepper and Tabasco-sauce pepper.

Brief Summary Text (15):

Capsicum frutescens extract can be obtained from Bio-Botanica, Inc. of Hauppauge, N.Y. and appears as a viscous fluid, having a sallow yellow color, a caustic and pungent aroma, and is soluble in ethanol.

Brief Summary Text (48):

For best results in the treatment of arthritis, the treatment should be repeated several times per day, such as in the range of 2 to 8 times per day, preferably 3-5 times per day, and continued for several days. Surprisingly, most patients do not experience the burning discomfort heretofore known as a very common side effect of topical capsaicin application.

Detailed Description Paragraph Table (1):

INGREDIENT WT % Deionized water 60.0 Propylene glycol 5.00 Triethanolamine 0.40  
Edetate disodium 0.02 Methyl paraben 0.10 Lavender extract 2.0  
Berganot extract 1.0 Capsicum frutescens 4.03 Xanthum gum 0.30 Histamine  
dihydrochloride 0.025 Hypericum pergoratum extracts 1.0% Arnica montana extract 1.0%

7% Colloidal oatmeal 3.0% Dipotassium  
0% Stearates and PEG's 2.0% Other  
aryl pidolate 4.03% Cyclomethicone 5.0%  
. Myristal myristate 0.5

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<u>L8</u>	16 and 17	13	<u>L8</u>
<u>L7</u>	arthritis	39851	<u>L7</u>
<u>L6</u>	capsicum frutescens	85	<u>L6</u>
<u>L5</u>	11 same 12 same 14	14	<u>L5</u>
<u>L4</u>	methacrylamide or acrylamide	70148	<u>L4</u>
<u>L3</u>	acylamide or methacrylamide	22007	<u>L3</u>
<u>L2</u>	enzyme	197871	<u>L2</u>
<u>L1</u>	cosmetic or topical or pharmaceutical	345858	<u>L1</u>

END OF SEARCH HISTORY



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